

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

*LINES*

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

Having thus described the preferred embodiments, what is claimed is:

1. A coupler comprising:

a body including first and second recesses adapted for respectively receiving first and second associated pins of an associated implement;

a first lock member movably secured to said body and movable between a retracted position and at least one extended position, said first lock member at least partially obstructing said second recess when moved to said at least one extended position so as to capture a second associated pin in said second recess;

an actuator operably coupled to said first lock member and operable to move said first lock member to and between said retracted position and said at least one extended position; and,

~~a supplemental lock member movably secured to said coupler body and~~  
~~movable between an unlocked position at least one locked position, said~~  
supplemental lock member, when located in said at least one locked position, engaging and preventing movement of said first lock member from said at least one extended position to said retracted position, said supplemental lock member movable from said at least one locked position to said unlocked position in response to movement of said coupler body to a select angular position relative to an associated arm ~~to which the coupler body is pivotably connected.~~

2. The coupler as set forth in claim 1, wherein said select angular position is an at least substantially fully curled position relative to the associated arm.

3. The coupler as set forth in claim 1, further comprising:  
a spring engaged with said supplemental lock member and biasing supplemental lock member to said at least one locked position.

4. The coupler as set forth in claim 1, wherein said actuator comprises one of a manual actuator, a fluid-cylinder actuator and a solenoid actuator.

5. The coupler as set forth in claim 1, wherein said supplemental lock member is pivotably secured to said body and adapted for pivoting movement between said at least one locked position and said unlocked position.

6. The coupler as set forth in claim 5, wherein said first lock member is slidably secured to said body and moves linearly between said retracted position and said at least one extended position.

7. The coupler as set forth in claim 6, wherein said first lock member moves between said retracted position and at least first and second extended positions, and wherein said supplemental lock member comprises a first stop surface that prevents movement of said first lock member from said first extended position to said retracted position and a second stop surface that prevents movement of said first lock member from said second extended position to said retracted position.

8. The coupler as set forth in claim 2, wherein said supplemental lock member comprises: (i) a first end that engages said first lock member when said supplemental lock member is located in said at least one locked position; and, (ii) a second end that projects outwardly from said body and engages the associated arm to which the coupler body is pivotably connected when said coupler body is at least substantially fully curled relative to the associated arm.

---

9. The coupler as set forth in claim 8, further comprising:  
a stem adjustably connected to said second end of said supplemental lock member and adapted for being positioned and secured in different positions relative to said second end of said supplemental lock member.

---

10. The coupler as set forth in claim 8, wherein a location of said second end of said supplemental lock member relative to said body provides a visual indication of said supplemental lock member being in said at least one locked position.

11. The coupler as set forth in claim 1, further comprising:  
a first proximity sensor located adjacent said second recess to sense a presence of the second associated pin in the second recess.

12. The coupler as set forth in claim 1, further comprising:  
a second proximity sensor for sensing a presence of said supplemental lock member in said at least one locked position.

13. The coupler as set forth in claim 5, wherein said body comprises first and second sidewalls defining a channel therebetween, said coupler further comprising a cross-pin that extends between said first and second sidewalls through said channel, said supplemental lock member pivotably connected to said cross-pin.

14. A coupler comprising:  
a body including first and second pin-receiving recesses;  
~~a main lock member selectively movable between an extended position~~  
where said main lock member at least partially obstructs one of said recesses and  
a retracted position;

a supplemental lock member connected to said body and movable between a locked position, where said supplemental lock member blocks movement of said main lock member from said extended position to said retracted position, and an unlocked position, said supplemental lock member including a portion adapted to engage an associated arm to which said body is connected only when said body is at least substantially curled relative to the associated arm whereby said supplemental lock member moves from said locked position to said unlocked position when said body is at least substantially fully curled relative to the associated arm.

15. The coupler as set forth in claim 14, wherein said supplemental lock member is pivotably secured to said body.

16. The coupler as set forth in claim 14, wherein said supplement lock member comprises a portion that provides a visual indicator to an observer if said supplement lock member is in said unlocked position.

17. The coupler as set forth in claim 14, wherein said supplemental lock member is spring-biased into said locked position.

18. A coupler comprising:

a body including first and second pin-receiving recesses and adapted for pivotable connection to an associated arm;

a main lock member selectively movable to a locked position where said main lock member at least partially obstructs one of said recesses to capture an associated pin therein; and,

means for preventing movement of said main lock member out of said locked position unless said body is at least substantially fully curled relative to the associated arm.